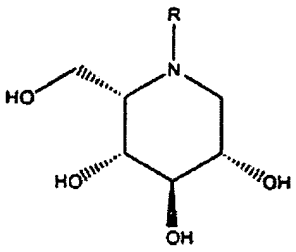
AMENDMENT TO THE CLAIMS

Please amend the claims as follows.

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) A compound of formula (I) in free or ~~a~~ pharmaceutically acceptable salt or prodrug ~~thereof~~ form:



(I)

wherein

R is C_{1-3}alkylAr^1 where Ar^1 is phenyl ~~or pyridyl~~;

wherein phenyl is substituted by one or more substituents selected from CN, $CON(R^1)_2$, SO_nR^2, $SO_2N(R^1)_2$, $N(R^5)_2$, $N(R^1)COR_2$, $N(R^1)SO_nR^2$, C_{0-6}alkylAr^2, C_{2-6}alkenylAr^2 and C_{3-6}alkynylAr^2 wherein one or more of the $-CH_2-$ groups of the alkyl chain may be replaced with a heteroatom selected from O, S and NR^3, provided that when the heteroatom is O, at least two $-CH_2-$ groups separate it from any additional O atom in the alkyl chain; or two adjacent substituents on the Ar^1 phenyl may together form a fused 5- or 6-membered saturated or unsaturated ring wherein the ring optionally contains 1 or 2 heteroatoms selected from O, S and NR^4 and is optionally substituted by one or more substituents selected from, an oxo group, C_{1-6}alkyl and C_{0-3}alkylAr^4;

and the Ar^1 phenyl is optionally substituted by one or more additional substituents selected from F, Cl, Br, CF_3, OCF_3, OR^3 and C_{1-6}alkyl;

~~and wherein pyridyl is substituted by one or more substituents, selected from, CN, $CON(R^1)_2$, SO_nR^2, $SO_2N(R^1)_2$, $N(R^5)_2$, $N(R^1)COR^2$, $N(R^1)SO_nR^2$, F, Cl, Br, CF_3, OCF_3, OR^3, C_{1-6}alkyl,~~

~~C_{0-6}alkylAr^2, C_{2-6}alkenylAr^2 and C_{3-6}alkynylAr^2 wherein one of the $-CH_2-$ groups of the alkyl chain may be replaced with a heteroatom selected from O, S and NR^3, provided that when the heteroatom is O, at least two $-CH_2-$ groups separate it from any additional O atom in the alkyl chain; or two adjacent substituents on the Ar' pyridyl may together form a fused 5- or 6-membered saturated or unsaturated ring wherein the ring optionally contains 1 or 2 heteroatoms selected from O, S and NR^4 and is optionally substituted by one or more substituents selected from, an oxo group, C_{1-6}alkyl and C_{0-3}alkylAr^4;~~

R^1 is H, C_{1-6}alkyl optionally substituted by OH, Ar^3, or C_{1-6} alkylAr^3, or the group $N(R^1)_2$ may form a 5- to 10-membered heterocyclic group optionally containing one or more additional heteroatoms selected from O, S and NR^3 and is optionally substituted by an oxo group;

R^2 is C_{1-6}alkyl optionally substituted by OH, Ar^3, or C_{1-6}alkylAr^3;

R^3 is H, or C_{1-6}alkyl;

R^4 is H, C_{1-6}alkyl or C_{0-3}alkylAr^4;

R^5 is H, C_{1-6}alkyl optionally substituted by OH, Ar^3, or C_{1-6}alkylAr^3, or the group $N(R^5)_2$ may form a 5- to 10-membered heterocyclic group optionally containing one or more additional heteroatoms selected from O, S and NR^3 and is optionally substituted by an oxo group;

Ar^2 and Ar^3 are independently phenyl or a 5- to 10-membered heteroaryl group containing up to 3 heteroatoms selected from O, S and NR^3, which may be optionally substituted by one or more substituents selected from F, Cl, Br, CN, CF_3, OCF_3, OR^3 and C_{1-6} alkyl;

Ar^4 is phenyl or pyridyl either of which may be optionally substituted by one or more substituents selected from F, Cl, Br, CN, CF_3, OCF_3, OR^3 and C_{1-6} alkyl; and

n =0, 1 or 2.

2. (Currently amended) The ~~A~~ compound as defined in claim 1 wherein R is C_1alkylAr^1.

3. (Currently amended) The ~~A~~ compound as defined in claim 1, wherein Ar^1 is phenyl, wherein phenyl is substituted as defined in claim 1.

4. (Currently amended) The ~~A~~ compound as defined in claim 1, wherein ~~Ar1~~ Ar^1 is phenyl,

wherein phenyl is substituted by one or more substituents selected from CN, $CON(R^1)_2$, $N(R^5)_2$ and C_{0-6} alkylAr^2 wherein one or more of the $-CH_2-$ groups of the alkyl chain may be replaced with a heteroatom selected from O, S and NR^3, provided that when the heteroatom is O, at least two $-CH_2-$ groups separate it from any additional O atom in the alkyl chain, or two adjacent substituents on the ~~Ar$_1$~~ Ar^1 phenyl may together form a fused 5- or 6-membered saturated or unsaturated ring wherein the ring optionally contains 1 or 2 heteroatoms selected from O and NR^4 and is optionally substituted by one or more substituents selected from, an oxo group, C_{1-6}alkyl and C_{0-3}alkylAr^4, and the Ar^1 phenyl is optionally substituted by one or more additional substituents selected from F, Cl, Br, CF_3, OCF_3, OR^3 and C_{1-6}alkyl.

5. (Currently amended) The ~~A~~ compound as defined in claim 1, wherein Ar^1 is phenyl, wherein phenyl is substituted by one or more substituents selected from CN, $CON(R^1)_2$, $N(R^5)_2$ and C_{0-6}alkylAr^2 wherein one or more of the $-CH_2-$ groups of the alkyl chain may be replaced with O, provided that at least two- CH_2- groups separate it from any additional O atom introduced into the alkyl chain and the Ar^1 phenyl is optionally substituted by one or more additional substituents selected from F, Cl, Br, CF_3, OCF_3, OR^3 and C_{1-6}alkyl.

6. (Currently amended) The ~~A~~ compound as defined in claim 1, wherein Ar^2 is phenyl which is optionally substituted by one or more substituents selected from F, Cl, Br, CN, CF_3, OCF_3, OR^3 and C_{1-6}alkyl.

7. (Currently amended) The ~~A~~ compound as defined in claim 1, wherein R^1 is H, C_{1-6}alkyl or C_{1-6}alkylAr^3.

8. (Currently amended) The ~~A~~ compound as defined in claim 1, wherein R^2 is Ar^3 or C_{1-6}alkylAr^3.

9. (Currently amended) The ~~A~~ compound as defined in claim 1, wherein Ar^3 is phenyl which may be optionally substituted by one or more substituents selected from F, Cl, Br, CN, CF_3, OCF_3, OR^3 and C_{1-6}alkyl.

10. (Currently amended) The ~~A~~ compound as defined in claim 1, wherein R^5 is C_{1-6}alkyl.

11. (Currently amended) A compound selected from

3,4,5-Piperidinetriol, 2-(hydroxymethyl)-1 [[2-methoxy-4-(phenylmethoxy)phenyl]methyl], (2S,3R,4R,5S);

3,4,5-Piperidinetriol, 1-[[2-chloro-4-(dimethylamino)phenyl]methyl]-2-(hydroxymethyl)-, (2S,3R,4R,5S);

3,4,5-Piperidinetriol, 1-[(3-cyano-4-dimethylamino-2-fluorophenyl)methyl]-2(hydroxymethyl)-, (2S,3R,4R,5S);

3,4,5-Piperidinetriol, 1-[[(4-acetylamino)phenyl]methyl]-2-(hydroxymethyl), (2S,3R,4R,5S);

3,4,5-Piperidinetriol, 1-[(2,3-dihydrobenzofuran-5-yl)methyl]-2-(hydroxymethyl)-, (2S,3R,4R,5S);

Benzamide, N-[(4-fluorophenyl)methyl]-4-[[2S,3R,4R,5S)-3,4,5-trihydroxy-2-(hydroxymethyl)-1-piperidinyl]methyl]-;

Benzamide, N-[1-phenylethyl]-4-[[(2S,3R,4R,5S)-3,4,5-trihydroxy-2-(hydroxymethyl)-1-piperidinyl]-methyl]-;

Benzamide, N-[1-(R)-(4-fluorophenyl)ethyl]-4-[[2S,3R,4R,5S)-3,4,5-trihydroxy-2-(hydroxymethyl)-1-piperidinyl]methyl]-;

3,4,5-Piperidinetriol, 2-(hydroxymethyl)-1-[[3-(phenylmethoxy)phenyl]methyl]-, (2S,3R,4R,5S);

3,4,5-Piperidinetriol, 2-(hydroxymethyl)-1-[[3-chloro-4-(phenylmethoxy)phenyl]methyl]-, (2S,3R,4R,5S);

3,4,5-Piperidinetriol, 2-(hydroxymethyl)-1-[[4-(phenylmethoxy)phenyl]methyl]-, (2S,3R,4R,5S);

3,4,5-Piperidinetriol, 2-(hydroxymethyl)-1-[[(4-dibutylamino)phenyl]methyl]-, (2S,3R,4R,5S);

3,4,5-Piperidinetriol, 1-[(*4-trans*-styrylphenyl)methyl]-2-(hydroxymethyl)-, (2S,3R,4R,5S);

Quinoline, 1-[4-[(2S,3R,4R,5S)-3,4,5-trihydroxy-2-(hydroxymethyl)-1-piperidinyl]methyl]-benzoyl-l,2,3,4-tetrahydro-;

Benzamide, N-[phenylmethyl]-4-[[(2S,3R,4R,5S)-3,4,5-trihydroxy-2-(hydroxymethyl)-1-piperidinyl]-methyl]-;

3,4,5-Piperidinetriol, 2-(hydroxymethyl)-1-(quinolin-6-yl)methyl-, (2S,3R,4R,5S);

3,4,5-Piperidinetriol, 1-[(3-cyano-4-(dimethylamino)phenyl)methyl)-2-(hydroxymethyl)-, (2S,3R,4R,5S);

3,4,5-Piperidinetriol, 2-(hydroxymethyl)-1-[(3-cyano-4-(diethylamino)-2-fluorophenyl)-methyl]-,(2S,3R,4R,5S);

3,4,5-Piperidinetriol, 2-(hydroxymethyl)-1-[(4-phenoxyphenyl)methyl)]-, (2S,3R,4R,5S);

3,4,5 -Piperidinetriol, 1-[(3,4-ethylenedioxyphenyl)methyl]-2-(hydroxymethyl)-, (2S,3R,4R,5S);

Benzamide, N-[4-[[(2S,3R,4R,5S)-3,4,5-trihydroxy-2-(hydroxymethyl)-1-piperidinyl]-methyl]phenyl]-;

Benzenesulfonamide, N-[4-[[(2S,3R,4R,5S)-3,4,5-trihydroxy-2-(hydroxymethyl)-1-piperidinyl]methyl]-phenyl]-;

3,4,5-Piperidinetriol, 2-(hydroxymethyl)-1-[[4-(2-pyridyl)phenyl]methyl]-, (S2,3R,4R,5S);

3,4,5-Piperidinetriol, 2-(hydroxymethyl)-1-[(2-phenyl-2*H*-l,4-benzoxazin-3(4H)-one-6-yl)methyl]-, (2S,3R,4R,5S);

3,4,5-Piperidinetriol, 1-[[3,5-dimethyl-4-(phenylmethoxy)phenyl]methyl]-2-(hydroxylmethyl)-, (2S,3R,4R,5S);

3,4,5-Piperidinetriol, 1-[[3-cyano-4-[N-butyl-4-*N*-(2-hydroxyethyl)amino]phenyl]methyl]-2-(hydroxymethyl)-, (2S,3R,4R,5S);

Phenylacetamide, N-[4-[[(2S,3R,4R,5S)-3,4,5-trihydroxy-2-(hydroxymethyl)-1-piperidinyl]methyl]phenyl]-;

3,4,5-Pipetidinetriol, 2-(hydroxymethyl)-1-[(2-hexyl-2*H*-l ,4-benzoxazin-3(4H)-one-6-yl)methyl]-, (2S,3R,4R,5S);

Benzenesulfonamide, N-[1-(S)-(4-fluorophenyl)ethyl]-4-[[(2S,3R,4R,5S)-3,4,5-trihydroxy-2-(hydroxymethyl)-1-piperidinyl]methyl]-;

[2-(S)-phenyl]propionamide, N-[4-[[(2S,3R,4R,5S)-3,4,5-trihydroxy-2-(hydroxymethyl)-1-piperidinyl]methyl]phenyl]-;

3,4,5-Piperidinetriol, 2-(hydroxymethyl)-1-[[2-propyl-2*H*-1,4-benzoxazin-3(4H)-one-6-yl]methyl]-, (2S,3R,4R,5S);

[2-(R)-phenyl]propionamide, N-[4-[[(2S,3R,4R,5S)-3,4,5-trihydroxy-2-(hydroxymethyl)-1-piperidinyl]methyl]phenyl]-;

Benzamide, N-[1-(S)-phenylethyl]-4-[[(2S,3R,4R,5S)-3,4,5-trihydroxy-2-(hydroxymethyl)-1-piperidinyl]methyl]-;

Benzamide, N-[l-(R)-phenylethyl]-4-[[(2S,3R,4R,5S)-3,4,5-trihydroxy-2-(hydroxymethyl)-1-piperidinyl]methyl]-;

Benzamide, N-[(4-fluorophenyl)methyl]-N-methyl-4-[[(2S,3R,4R,5S)-3,4,5-trihydroxy-2-(hydroxymethyl)-1-piperidinyl]methyl]-;

Benzamide, N-hexyl-4-[[(2S,3R,4R,5S)-3,4,5-trihydroxy-2-(hydroxymethyl)-1-piperidinyl]methyl]-; ~~and~~

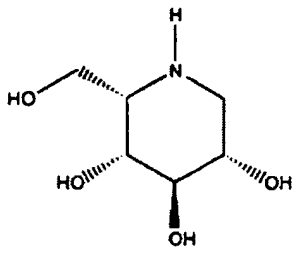
in free or pharmaceutically acceptable salts or prodrugs ~~thereof~~ form.

12. (Canceled).

13. (Previously Presented) A pharmaceutical composition comprising a compound of formula (I) as defined in claim 1, together with one or more pharmaceutically acceptable carriers, excipients and/or diluents.

14. (Previously Presented) A process for the preparation of a compound of formula (I) as defined in claim 1, the process comprising:

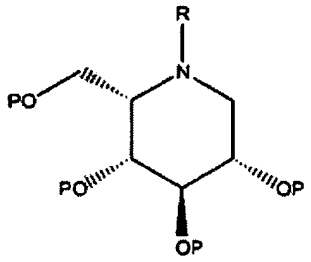
a) reductive amination of an aldehyde of formula R^5CHO wherein R^5 is $C_{0-2}alkylAr^1$ where Ar^1 is as defined in claim 1, with a compound of formula (II):



(II)

or

b) deprotection of a compound of formula (III):



(III)

wherein R is as defined in claim 1, and P, which may be the same or different, are hydroxy protecting groups.

15. (Withdrawn-Previously Presented) A method of inhibiting of glucosylceramide synthase in a patient in need thereof, comprising administering to the patient an effective amount of a compound of formula (I) as defined in claim 1.

16. (Withdrawn-Previously Presented) A method of treating a glycolipid storage disease in a patient in need thereof, comprising administering to the patient an effective amount of a compound of formula (I) as defined in claim 1.

17. (Withdrawn-Previously Presented) The method of claim 16, wherein the glycolipid storage

disease is Gaucher disease, Sandhoffs disease, Tay-Sachs disease, Fabry disease or GMI gangliosiaosis.

18. (Withdrawn-Previously Presented) A method of treating a disorder selected from Niemann-Pick disease type C, mucopolysaccharidosis type I, mucopolysaccharidosis type IIIA, mucopolysaccharidosis type IIIB, mucopolysaccharidosis type VI, mucopolysaccharidosis type VII, α-mannosidosis and mucolipidosis type IV in a patient in need thereof, comprising administering to the patient an effective amount of a compound of formula (I) as defined in claim 1.

19. (Withdrawn-Previously Presented) A method of treating cancer in which glycolipid synthesis is abnormal in a patient in need thereof, comprising administering to the patient an effective amount of a compound of formula (I) as defined in claim 1.

20. (Withdrawn-Previously Presented) The method of claim 19, wherein the cancer in which glycolipid synthesis is abnormal is selected from brain cancer, neuronal cancer, neuroblastoma, renal adenocarcinoma, malignant melanoma, multiple myeloma and multi-drug resistant cancer.

21. (Withdrawn-Previously Presented) A method of treating a disorder selected from Alzheimer's disease, epilepsy, stroke, Parkinson's disease and spinal injury in a patient in need thereof, comprising administering to the patient an effective amount of a compound of formula (I) as defined in claim 1.

22. (Withdrawn-Previously Presented) A method of treating diseases caused by (i) infectious microorganisms which utilize glycolipids on the surface of cells as receptors for either the organism itself or for toxins produced by the organism, or (ii) infectious organisms for which the synthesis of glucosylceramide is an essential or important process, in a patient in need thereof, comprising administering to the patient an effective amount of a compound of formula (I) as defined in claim 1.

23. (Withdrawn-Previously Presented) A method of treating diseases associated with abnormal glycolipid synthesis in a patient in need thereof, comprising administering to the patient an effective amount of a compound of formula (I) as defined in claim 1.

24. (Withdrawn-Previously Presented) A method of treating a condition treatable by the administration of a ganglioside in a patient in need thereof, comprising administering to the patient an effective amount of a compound of formula (I) as defined in claim 1.

25. (Withdrawn-Previously Presented) The method of claim 24, wherein the condition is treatable by the administration of a GMI ganglioside.

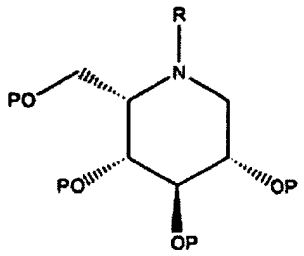
26. (Withdrawn-Previously Presented) A method of reversibly rendering a male mammal infertile, comprising administering to the male mammal an effective amount of a compound of formula (I) as defined in claim 1.

27. (Withdrawn-Previously Presented) A method of treating obesity in a patient in need thereof, comprising administering to the patient an effective amount of a compound of formula (I) as defined in claim 1.

28. (Withdrawn-Previously Presented) A method of treating inflammatory diseases or disorders associated with macrophage recruitment and activation in a patient in need thereof, comprising administering to the patient an effective amount of a compound of formula (I) as defined in claim 1.

29. (Withdrawn-Previously Presented) The method of claim 28, wherein the inflammatory disease or disorder associated with macrophage recruitment and activation is selected from rheumatoid arthritis, Crohn's disease, asthma and sepsis.

30. (Withdrawn) A compound of formula (III):



(III)

wherein R is as defined in claim 1 and P, which may be the same or different, are hydroxy protecting groups.